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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,536	01/15/2002	Dershi Wang	05918-220001	5003

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BOSTON, MA 02110

EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 08/26/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/053,536

Applicant(s)

WANG ET AL.

Examiner

Jane J Rhee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) 31-44 and 46-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-30,45 are drawn to an article, classified in class 428/113.
- II. Claims 31-44,46-49, are drawn to a method, classified in class 264.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by another and materially different process such as extruding instead of molding.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mrs. Leber on May 13, 2003 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-30 and 45. Affirmation of this election must be made by applicant in replying to this Office action. Claims 31-44,46-49 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 16-22,24,27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Okawa et al. (5659930).

Okawa discloses an interface tape comprising first (4 number 10) and second yarns or fibers (figure 4 number 20), the first yarn or fiber comprising a first polymeric material and the second yarn or fiber comprising a second different polymeric material (col. 3 lines 53-54), the yarns or fibers being arranged so that the first yarn or fiber predominates on one side of the substrate and the second yarn or fiber predominates on the other side of the substrate (figure 4 numbers 10 and 20). Okawa discloses that the polymeric materials of the first and the second yarns are selected to be capable of adhesion to respectively first and second polymers to be joined using the interface tape (col. 4 lines 39-40). Okawa discloses that the substrate is a plain-woven weave (col. 3

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line 43) and that one of the polymeric materials comprises polypropylene (col. 3 lines 36). Okawa discloses that one of the polymeric materials is capable of adhesion to a polyurethane (col. 4 line 45). Okawa discloses that the first and second yarns have different deniers (col. 3 lines 67 to col. 4 lines 1-2). Okawa discloses that the yarns or fibers is coated with polyurethane (col. 4 lines 45) to enhance adhesion (col. 4 lines 40-43). Okawa discloses that one of the yarns or fibers includes an outer surface that comprises polyurethane and wherein a surface of the substrate is coated with polyurethane (col. 4 line 45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10,12-25,27-30 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Northrup et al. in view of Okawa (5659930).

Northrup et al. discloses a fastener tape comprising a molded resin base sheet with an array of integrally molded fastener elements extending from a first side of the base sheet (figure 3 number 10), and a substrate permanently secured to a second side of the base sheet (figure 3 number 22), the substrate comprising fibers (col. 4 line 19). Northrup et al. discloses that the substrate comprises a nonwoven material (col. 4 line

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21). Northrup et al. discloses that one of the polymeric materials comprises polypropylene (col. 4 line 19). Northrup et al. discloses that the polymeric material is capable of adhesion to the resin of the base sheet (figure 2 numbers 22,23). Northrup et al. discloses that the resin is preferably of a thermoplastic resin of the polyolefin type (col. 4 lines 55-56).

Northrup et al. fail to disclose that the substrate comprises first and second yarns and fibers, the first yarn comprising a first polymeric material and the second yarn or fiber comprising a second, different polymeric materials. Northrup et al. fail to disclose that the first yarn or fiber predominates on a first side of the substrate and the second yarn or fiber predominates on a second opposite side of the substrate. Northrup et al. fail to disclose that the substrate comprises a woven fabric. Northrup et al. fail to disclose that the fabric is woven in a plain weave. Northrup et al. fail to disclose that the molded resin base sheet comprises polypropylene. Northrup et al. fail to disclose that the polymeric material is capable of adhesion to a polyurethane. Northrup et al. fail to disclose that the first and second yarn fibers have a denier of from about 70-1000. Northrup et al. fail to disclose that the first and second yarns or fibers have different deniers. Northrup et al. fail to disclose that one of the fibers is coated with polyurethane. Northrup et al. fail to disclose that one of the yarns or fibers includes an outer surface that comprises polyurethane. Northrup et al. fail to disclose wherein at least one surface of the substrate is coated with a coating selected to enhance adhesion. Northrup et al. fail to disclose wherein a surface of the substrate opposite to the surface to which the base sheet is secured is coated with a polyurethane coating.

Okawa teaches an interface tape comprising first (4 number 10) and second yarns or fibers (figure 4 number 20), the first yarn or fiber comprising a first polymeric material and the second yarn or fiber comprising a second different polymeric material (col. 3 lines 53-54), the yarns or fibers being arranged so that the first yarn or fiber predominates on one side of the substrate and the second yarn or fiber predominates on the other side of the substrate (figure 4 numbers 10 and 20) for the purpose of obtaining excellent bonding strength and configuration stability (col. 1 lines 55).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Northrup et al. with an interface tape comprising first and second yarns or fibers, the first yarn or fiber comprising a first polymeric material and the second yarn or fiber comprising a second different polymeric material, the yarns or fibers being arranged so that the first yarn or fiber predominates on one side of the substrate and the second yarn or fiber predominates on the other side of the substrate in order to obtain excellent bonding strength and configuration stability (col. 1 lines 55) as taught by Okawa.

Okawa teaches that the polymeric materials of the first and the second yarns are selected to be capable of adhesion to respectively first and second polymers to be joined using the interface tape (col. 4 lines 39-40) for the purpose of providing a thick foundation (col. 1 line 58).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Northrup et al. with the polymeric materials of the first and the second yarns are selected to be capable of adhesion to

respectively first and second polymers to be joined using the interface tape in order to provide a thick foundation (col. 1 line 58) as taught by Okawa.

Okawa teaches that the substrate is a plain woven weave (col. 3 line 43) and that one of the polymeric materials comprises polypropylene (col. 3 lines 36) for the purpose of providing monofilaments according to the usage of the surface type fastener (col. 3 lines 53-54).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Northrup et al. with the substrate that is a plain woven weave and that one of the polymeric materials comprises polypropylene in order to provide monofilaments according to the usage of the surface type fastener (col. 3 lines 53-54) as taught by Okawa.

Okawa teaches that one of the polymeric materials is capable of adhesion to a polyurethane (col. 4 line 45) since the yarns or fibers are coated with polyurethane (col. 4 lines 45) to enhance adhesion (col. 4 lines 40-43) therefore, one of the yarns or fibers includes an outer surface that comprises polyurethane and wherein a surface of the substrate is coated with polyurethane (col. 4 line 45) for the purpose of obtaining good adhesion property relative to the first and second foundation fabrics (col. 4 lines 41-43).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Northrup et al. with one of the polymeric materials is capable of adhesion to a polyurethane since the yarns or fibers are coated with polyurethane (col. 4 lines 45) to enhance adhesion therefore, one of the yarns or fibers includes an outer surface that comprises polyurethane and wherein a

surface of the substrate is coated with polyurethane in order to obtain good adhesion property relative to the first and second foundation fabrics (col. 4 lines 41-43) as taught by Okawa.

Okawa teaches that the first and second yarns have different deniers (col. 3 lines 67 to col. 4 lines 1-2) for the purpose of having a surface type fastener with a desired thickness can be produced without effecting the bond strength between and the stability in the shape and configuration of the first and second foundation fabrics (col. 6 lines 30-38).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Northrup et al. with the first and second yarns to have different deniers in order to have a surface type fastener with a desired thickness can be produced without effecting the bond strength between and the stability in the shape and configuration of the first and second foundation fabrics (col. 6 lines 30-38) as taught by Okawa.

As to the first and second yarn fibers have a denier of from about 70-1000, Okawa teaches that the second foundation fabric has warp threads wherein each composed of a thread having a larger count of yarn than the warp threads of the first foundation fabric, therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide the first and second yarn fibers with a denier of from about 70-1000, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

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3. Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Northrup et al. and Okawa in view of Billarant (5500268).

Northrup et al. and Okawa discloses the fastener tape described above.

Northrup et al. and Okawa fail to disclose that the fabric further disclose at least one magnetically attractable third yarn or fiber. Billarant teaches a magnetically attractable material such as a metal shim (col. 6 line 5) for the purpose of magnetically attract to the magnets to create a seal (col. 6 liens 36-40).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to provide Northrup et al. and Okawa with a magnetically attractable material such as a metal shim in order to magnetically attract to the magnets to create a seal (col. 6 liens 36-40).

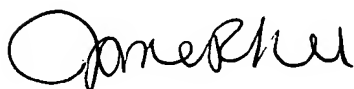
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 703-605-4959. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Jane Rhee
August 14, 2003



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

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